The Aging in Manitoba Longitudinal Study

Introduction

2001 marked the thirtieth year of *The Aging in Manitoba Longitudinal Study,* the longest continuous study of aging in Canada[1]. Over three decades, our study has involved just under nine thousand individuals, representative of all seniors in Manitoba. The results of the study have been used in developing policies, services and activities with elder Manitobans. For example, *AIM* study data provided support for the insuring of personal care home services in the early 1970s, followed by the development of Manitoba Home Care services in the mid-1970s and the Manitoba Support Services to Seniors Program in the 1980s. In addition many academic researchers in Canada and other countries have used the data. *Aging in Manitoba* (*AIM*) addresses such questions as successful aging, and the changing impact of various factors on health, well-being, and the use of health services. The special characteristics of the oldest-old in Manitoba are now of particular interest. This information will enable program developers and policy makers to protect our most vulnerable older citizens, even within strict fiscal targets. Further, these answers will help to produce the best possible services, research, and education to support the continuing independence of older Manitobans as we advance within the twenty-first century.

Background

Beginning in 1971, *AIM* surveyed 4803 individuals. A representative sample was drawn from all Manitobans aged 65 and over that lived either in their own homes or in institutions. A second cross-section of 1302 seniors (aged 60 and over) was surveyed in 1976, with a third cross-section of 2,877 seniors added in 1983. Also in 1983, those individuals who were still available from 1971 and 1976 (2401 persons) were re-interviewed. In 1990, the total of 3,218 survivors from all three cross-sections was re-interviewed. During the summer of 1996, *AIM* again surveyed 1868 survivors from all previous cross-sections. In total 8947 older Manitobans have contributed to *AIM.* At the request of Manitoba Health, in the spring of 1998, a small sub-set of the 1996 panel; i.e., those who lived in the areas affected by the 1997 Red River Flood of the Century were interviewed using quantitative and qualitative questions. The purpose of this sub-study was to assist the provincial government in being better able to respond to any special needs of seniors during and following such a major disaster. In the summer of 2001, thirty years after the initial interviews, 1012 survivors from all cross-sections were interviewed again. For some individuals this was their fourth involvement with the study over eighteen years, and for others their sixth occasion to participation over twenty-five or thirty years.

Each survey is undertaken by a team of interviewers, hired through the Department of Community Health Sciences at the University of Manitoba, who travel throughout the province to speak personally with seniors in their own homes or in care facilities. Interviewers are chosen for their interviewing experience, skills in relating to older

[1] Partial funding of this major enterprise has been secured from National Health Research and Development Program (NHRDP), now the Canadian Institutes for Health Research (CIHR), Health Canada, the Social Sciences and Humanities Research Council of Canada (SSHRC), Veterans Affairs Canada and from Manitoba Health with administrative support from the University of Manitoba.

individuals, knowledge of rural areas and ability to speak a second language. In a few cases we have used interpretation services. *AIM* is proud of its ability to accommodate individuals in their own language. A special week-long training program provides interviewers with special tips for interviewing older adults, and intensive instruction on using the *AIM* survey instrument.

In all waves of the study the interviews have collected information on social demographic and social psychological characteristics, physical and mental health status and functioning, finances, leisure activities, care and support networks, and consumption of services. The interview data have also been linked to the full spectrum of health services from the databases of Manitoba Health. Following the 2001 survey, the utilization data continues to be linked to the interview data and will eventually exceed thirty-five years of data (1970 – 2005). Death certificates have also been, or are being, obtained for most known decedents. All of these data are merged into the full *AIM* database, which is archived for use by other researchers.

Over the history of *Aging in Manitoba*, the research has involved over 64 Co-Principal Investigators, Collaborators and Community Partners and over 20 Thesis and Dissertation Students and many more who have used the data for term papers, course projects, etc. The efforts of these people have produced over 400 articles, book chapters, monographs and conference presentations and generated over 2000 *AIM* related citations in main stream journals. We have also employed 181 Student Interviewers during the six field surveys and various sub-studies, 21 Student Research Assistants for short-term project support and 14 Staff members although we have never employed more than 2 ½ staff at any one time.

Results of the Research

Research using *AIM* data has addressed questions of social isolation, loneliness, income and expenditures, self-perceived financial security, unpaid work, health status, use of physician services, successful aging, compression of mortality versus expansion of disability, self-perceived health status, health locus of control, formal and informal social support, informal care, ethnic diversity, perceived respect, characteristics of the oldest-old, health of aging women and sample mortality. Among many interesting conclusions from these analyses we have found:

1) Social isolation has become more extreme (both high and low scores) and is closely associated with geographic location
2) Average incomes and expenditures have increased (more for women than men)
3) Perceived financial security has decreased slightly (more for men than women)
4) Levels of unpaid work have remained at about the same level
5) Older Manitobans remain optimistic about their self-perceived health status despite decreased objective health status and increased visits to physicians
6) There is almost no support for the compression of morbidity hypothesis as functional status is considerably more limited among the oldest respondents
7) Recent measures show functional status is more limited than earlier waves
8) Health determinants are the best predictors of successful aging
9) Those who perceive themselves to be in control of their lives are more satisfied with their health and with their use of health services

10) Informal support and care remain prevalent in Manitoba
11) Formal support supplements, but does not replace, informal care
12) Ethnic diversity has some explanatory power with isolation and informal support
13) The oldest-old are increasingly more frail, poorer and more socially isolated
14) Aging women continue to exhibit an excess of morbidity despite lower mortality.

Many additional results are contained in the attached Selected Findings document. We have continued to communicate results to *AIM* respondents, other seniors, and their families, community groups, program managers and policy makers in more populist formats.

Our web-site: www.aginginmanitoba.ca is another means of communicating with our more distant colleagues. We are expanding the *AIM* website to include more work in progress and selected data from our evolving data archive.

We also have the opportunity to use our Manitoba data to compare with other relevant surveys many of which also occurred in 1990, 1996 and 2001, such as the Canadian Census, the General Social Survey, the National Population Health Survey, and the Manitoba/Canada Study of Health and Aging. These comparisons allow us to view Manitoba seniors in relation to seniors across the prairie region and to seniors in Canada as a whole. We have also begun working on some international comparisons with studies in the US, the Netherlands, Italy, Australia and Germany.

Conclusions

Over the past thirty years, *AIM* data have been used to shape policies and develop programs with Manitoba seniors. The ongoing analyses will continue to provide information relevant to policy issues, particularly for the oldest seniors who also use the greatest proportion of health services. Additional research looks at the influence of an active lifestyle on well-being; factors that over time relate to specific conditions such as dementia and diabetes; continued availability of support by aging caregivers when faced with changing formal support networks in the community; and the need for alternative housing options for frail seniors, particularly those who are single or widowed.

The *Aging in Manitoba* database is a valuable resource for purposes of continuing gerontological research, education, and policy development. The inclusion of both utilization and interview information makes *AIM* data well suited to analyses of health and social policy issues relative to seniors in general, and in particular to those questions which are best answered by studying changes over time.

Status and contact info:

1. Current status is ongoing and while we are discussing some additional changes to the protocol as we do at every wave, it is still too early to list them.

2. Status is ongoing, the start date for the interviews is 1971 and the utilization data start with 1970. We anticipate that there will be fewer than 100 panel survivors by 2011. We would therefore anticipate terminating the study with the analysis and linking of utilization data to a 2006 panel. If we are able to fold the AIM panel members into another longitudinal study, such as the Canadian Longitudinal Study on Aging, which is slated to go into the field in 2007, we will obviously do so.

3. The AIM website (in the summary) is www.aginginmanitoba.ca.

4. Our usual keywords are some combination of the following:
   Aging research, longitudinal, Canada, Manitoba, social isolation, loneliness, income and expenditures, self-perceived financial security, unpaid work, health status, use of physician services, compression of mortality, expansion of disability, self-perceived health status, health locus of control, formal and informal social support, informal care, ethnic diversity, perceived respect, characteristics of the oldest-old, health of aging women, rural aging, and sample mortality.

5. Betty Havens is the contact person for Aging in Manitoba, phone: (204) 789-3427 and the e-mail is aim@umanitoba.ca.

6. I do not believe that there is any need for additional details for the data base.

In addition, we would appreciate it if you completed the chart below:

Country:	Canada		Physiological Measures	X	Psychological Measures
Sample Size:	8,947	X	Functional Health	X	Cognitive Abilities
Age Group:	60+; oldest is 108 years	X	Lifestyle: Physical Activity	X	Social and Demographic Measures
Gender:	Both		Lifestyle: Nutrition	X	Health Services Utilization
# Cohorts:	3	X	Lifestyle: Other		
Total Waves:	6 plus 4 subsets	X	Minorities		